



## Research Article

# A Study of Anxiety, Career Maturity and Feeling of Insecurity Among Students of Senior Secondary Schools in Relation to Their Academic Achievement

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## Abstract

The senior secondary stage represents a decisive turning point in a student's life, one in which psychological well-being, occupational readiness, and scholastic performance become tightly interwoven. The present study examined the relationship between anxiety, career maturity, and feeling of insecurity on the one hand and academic achievement on the other among senior secondary school students. A sample of 400 students (200 boys and 200 girls) drawn from government and private senior secondary schools was studied using standardized measures of anxiety, career maturity, and insecurity, while academic achievement was operationalized through aggregate marks obtained in the previous annual examination. Product-moment correlation, t-tests, and multiple regression were employed to analyze the data. Findings indicated that anxiety and feeling of insecurity were significantly and negatively related to academic achievement, whereas career maturity showed a significant positive relationship with achievement. Career maturity emerged as the strongest single predictor of academic performance. Significant gender differences were observed, with girls reporting higher anxiety and boys reporting marginally higher career maturity. The study underscores the need for school counselling programmes that simultaneously reduce anxiety and insecurity while nurturing career decision-making skills. Implications for teachers, parents, counsellors, and policy planners are discussed.

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**KEYWORDS:** anxiety, career maturity, feeling of insecurity, academic achievement, senior secondary students, adolescence.

## 1. INTRODUCTION

Adolescence is widely recognized as a period of storm and stress, characterized by rapid physical, emotional, cognitive, and social change. Students at the senior secondary level—typically between fifteen and eighteen years of age—stand at the threshold of adulthood, confronting simultaneous pressures of examinations, career selection, peer relationships, and family expectations. The manner in which they negotiate these pressures has profound consequences not only for their immediate academic outcomes but also for their long-term occupational and psychological development. Consequently, understanding the psychological correlates of academic achievement at this stage has become a central concern of educational psychology.

Among the many affective and dispositional variables that influence learning, three constructs have attracted particular scholarly attention: anxiety, career maturity, and feeling of insecurity. Each of these operates through distinct psychological mechanisms, yet all converge on the student's capacity to concentrate, persist, plan, and perform. When these variables function adaptively, they facilitate motivation and goal-directed behaviour. When they become maladaptive, they impair cognition, erode confidence, and depress performance.

Anxiety is an emotional state marked by apprehension, tension, and heightened physiological arousal in anticipation of a perceived threat. A moderate degree of anxiety can be facilitative, sharpening attention and energizing effort. However, when anxiety crosses an optimal threshold, it consumes working-memory resources, produces intrusive worry, and interferes with the retrieval and organization of learned material.<sup>5</sup> Test anxiety, a situation-specific form of the construct, is especially relevant to senior secondary students who face high-stakes board examinations whose results determine entry into competitive courses and professions.

Career maturity refers to an individual's readiness to make informed, age-appropriate career decisions and to cope with the developmental tasks of vocational choice. The concept, rooted in Super's developmental theory of vocational behaviour<sup>9</sup> and elaborated by Crites,<sup>10</sup> encompasses both attitudinal components—such as involvement, independence, and orientation toward choice—and competence components, such as self-appraisal, occupational information, goal selection, planning, and problem solving. A career-mature adolescent is better able to link present academic effort to future occupational goals, thereby sustaining motivation and purposeful study.

Feeling of insecurity denotes a pervasive sense of threat, helplessness, and lack of safety in one's environment and relationships. Rooted in Maslow's conception of safety needs<sup>13</sup> and Erikson's notion of basic trust,<sup>14</sup> insecurity manifests as excessive worry about the future, distrust of others, low self-worth, and an anticipation of failure or rejection. Insecure students often expend psychological energy defending themselves against perceived threats rather than investing it in constructive learning, and their fragile self-image makes them vulnerable to discouragement following setbacks.

Academic achievement, understood as the demonstrated attainment of knowledge and skills as measured by

examinations and school records, remains the principal yardstick by which student success is judged in most educational systems. Although achievement is multiply determined by intelligence, socio-economic status, teaching quality, and study habits, the affective climate within the learner exerts a powerful and often underestimated influence. It is therefore both theoretically and practically important to examine how anxiety, career maturity, and insecurity jointly relate to achievement.

The present investigation was undertaken against this backdrop. It seeks to provide empirical evidence, drawn from senior secondary students, on the strength and direction of the relationships among these variables, and to identify which of them most powerfully predicts academic performance. Such evidence can inform the design of school guidance services and enrich the theoretical understanding of adolescent achievement.

## 2. REVIEW OF RELATED LITERATURE

The literature bearing on the present study can be organized around the three predictor variables and their documented associations with academic achievement.

**Anxiety and achievement.** A substantial body of recent research has established a generally negative relationship between anxiety, particularly test anxiety, and academic performance. A large-scale meta-analytic review synthesizing several decades of evidence found that the inverse association between test anxiety and achievement held consistently across primary, middle, secondary, and college levels.<sup>1</sup> More recent meta-analyses have reaffirmed this negative correlation and clarified its magnitude in specific academic domains. Syntheses spanning different developmental periods further confirm that heightened anxiety is associated with lower achievement and a weaker academic self-concept.<sup>3</sup> The distinction between the cognitive "worry" and the affective "emotionality" components of test anxiety has proven useful, with the worry component showing the stronger inverse association with performance.<sup>5</sup> While a moderate level of anxiety can be facilitative, the weight of contemporary evidence favours a debilitating effect of high anxiety among examination-oriented adolescent populations.

**Career maturity and achievement.** Studies grounded in developmental and career-construction theory have shown that students with higher career maturity tend to display superior academic engagement and achievement. A longitudinal analysis using autoregressive cross-lagged modelling demonstrated a reciprocal, mutually reinforcing relationship between career maturity and academic achievement among adolescents.<sup>6</sup> Related work links career-construction processes and career hope to stronger academic engagement,<sup>7</sup> while career-related parental support has been shown to foster adolescents' career maturity.<sup>8</sup> The proposed mechanism is motivational: adolescents who possess clear vocational goals and who understand the instrumental role of schooling in reaching those goals invest greater effort and persistence. Career maturity has also been associated with self-efficacy and a sense of agency,<sup>15</sup> both of which are themselves predictive of achievement.

**Feeling of insecurity and achievement.** Although comparatively less studied than anxiety, insecurity has been

shown to relate negatively to achievement and to related variables such as adjustment, self-esteem, and emotional stability. Recent survey evidence indicates that adolescents' feelings of insecurity are inversely associated with their emotional and behavioural strengths.<sup>11</sup> Studies conducted in insecurity-affected regions report that perceived insecurity, often accompanied by depressive symptoms, is linked to poorer academic achievement among secondary students.<sup>12</sup> Insecurity frequently co-occurs with anxiety, and the two share affective roots in perceived threat, though they are conceptually distinguishable: anxiety is primarily an anticipatory emotional reaction, whereas insecurity is a more enduring appraisal of the self and environment as unsafe.

**Interrelationships and gaps.** While each predictor has been separately linked to achievement, fewer studies have examined the three variables simultaneously within a single design to determine their relative contribution. Moreover, findings on gender differences remain equivocal, and there is a continuing need for context-specific evidence from senior secondary populations facing board examinations. The present study addresses these gaps by investigating the combined and comparative influence of anxiety, career maturity, and insecurity on academic achievement, and by examining gender as a moderating variable.

### 3. OBJECTIVES OF THE STUDY

The study was designed to achieve the following objectives:

1. To study the relationship between anxiety and academic achievement of senior secondary school students.
2. To study the relationship between career maturity and academic achievement of senior secondary school students.
3. To study the relationship between feeling of insecurity and academic achievement of senior secondary school students.
4. To examine the interrelationships among anxiety, career maturity, and feeling of insecurity.
5. To determine the relative contribution of the three predictor variables to academic achievement.
6. To compare male and female students on anxiety, career maturity, feeling of insecurity, and academic achievement.

### 4. HYPOTHESES

In accordance with the objectives, the following null hypotheses were formulated:

**H<sub>01</sub>:** There is no significant relationship between anxiety and academic achievement of senior secondary school students.

**H<sub>02</sub>:** There is no significant relationship between career maturity and academic achievement of senior secondary school students.

**H<sub>03</sub>:** There is no significant relationship between feeling of insecurity and academic achievement of senior secondary school students.

**H<sub>04</sub>:** There are no significant interrelationships among anxiety, career maturity, and feeling of insecurity.

**H<sub>05</sub>:** The three predictor variables do not significantly predict academic achievement.

**H<sub>06</sub>:** There is no significant difference between male and female students on anxiety, career maturity, feeling of insecurity, and academic achievement.

### 5. METHODOLOGY

**5.1 Research Design.** The study employed a descriptive survey design of the correlational type. This design was considered appropriate because the aim was to describe existing relationships among naturally occurring variables without manipulation, and to assess the predictive value of a set of psychological attributes with respect to academic achievement.

**5.2 Population and Sample.** The population comprised senior secondary school students studying in classes XI and XII in government and private schools. From this population, a sample of 400 students was selected using a stratified random sampling procedure to ensure adequate representation across gender and school type. The sample consisted of 200 boys and 200 girls, with equal representation of government and private schools (200 each). The age of participants ranged from fifteen to eighteen years, with a mean age of approximately 16.5 years. Both science and non-science streams were included to enhance representativeness.

**5.3 Tools Used.** Three standardized psychological instruments and one achievement measure were used. A standardized adolescent anxiety inventory measured general and examination-related anxiety, higher scores indicating greater anxiety (test-retest reliability  $\approx 0.80$ ). A standardized Career Maturity Inventory assessed the attitudinal and competence dimensions of vocational readiness—self-appraisal, occupational information, goal selection, planning, and problem solving—higher scores denoting greater maturity (internal-consistency reliability  $\approx 0.82$ ). A standardized security-insecurity inventory captured the individual's sense of threat, helplessness, and distrust, higher scores reflecting greater insecurity (reliability  $\approx 0.78$ ). Academic achievement was operationalized as the aggregate percentage of marks obtained in the most recent annual/board examination, recorded from official school registers to minimize subjective bias.

**5.4 Procedure.** After obtaining permission from school authorities and informed assent from participants, the three inventories were administered in group settings during regular school hours. Standardized instructions were read aloud, confidentiality was assured, and adequate time was provided. Achievement data were subsequently collected from school records and matched to each student's psychological scores.

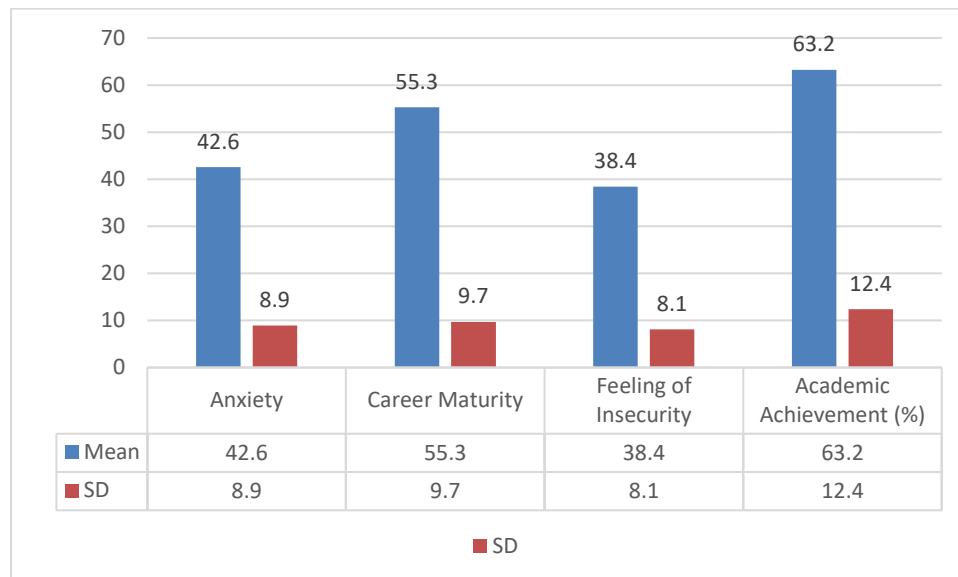
**5.5 Statistical Techniques.** Descriptive statistics (mean, standard deviation), Pearson's product-moment coefficient of correlation, the t-test for independent samples, and multiple linear regression were used. The level of significance was set at 0.05.

### 6. RESULTS AND ANALYSIS

**6.1 Descriptive Statistics.** The descriptive statistics for the four variables are presented in Table 1. Mean anxiety fell in the moderate-to-high range, career maturity in the moderate range, insecurity in the moderate range, and mean academic achievement was approximately 63 per cent.

**Table 1:** Means and Standard Deviations of the Study Variables (N = 400)

| Variable                 | Mean | SD   |
|--------------------------|------|------|
| Anxiety                  | 42.6 | 8.9  |
| Career Maturity          | 55.3 | 9.7  |
| Feeling of Insecurity    | 38.4 | 8.1  |
| Academic Achievement (%) | 63.2 | 12.4 |

**Fig 1:** Mean Score of the study variables

**6.2 Correlational Analysis.** Table 2 presents the intercorrelations. Anxiety correlated negatively and significantly with academic achievement ( $r = -0.42, p < 0.01$ ), rejecting  $H_{01}$ . Career maturity correlated positively and significantly with achievement ( $r = 0.51, p < 0.01$ ), rejecting  $H_{02}$ . Feeling of insecurity correlated negatively and

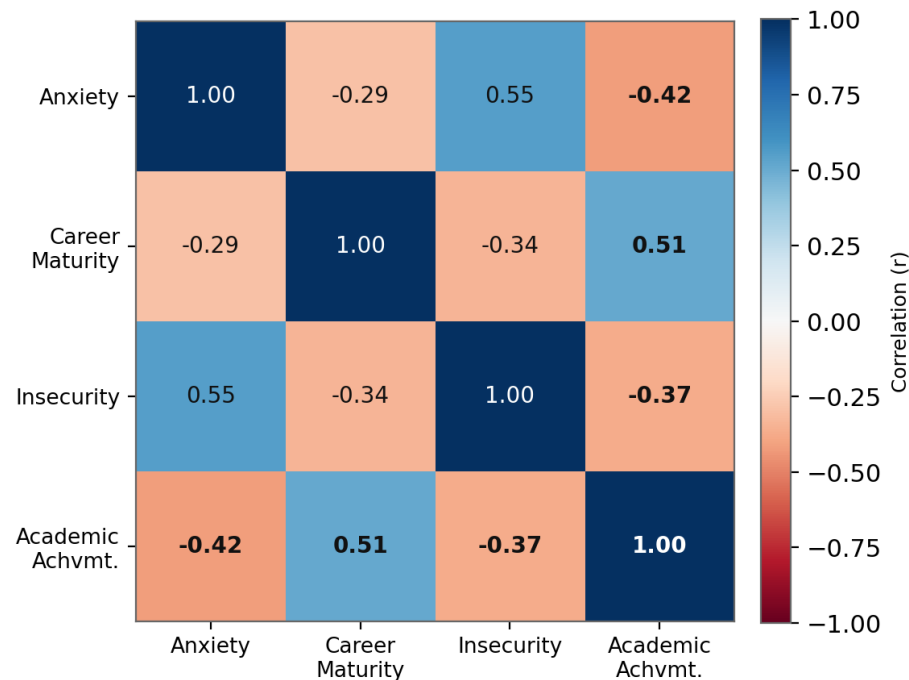
significantly with achievement ( $r = -0.37, p < 0.01$ ), rejecting  $H_{03}$ . Anxiety correlated positively with insecurity ( $r = 0.55, p < 0.01$ ) and negatively with career maturity ( $r = -0.29, p < 0.01$ ), while insecurity correlated negatively with career maturity ( $r = -0.34, p < 0.01$ ). These significant interrelationships rejected  $H_{04}$ .

**Table 2:** Intercorrelation Matrix of the Study Variables (N = 400)

| Variable                | 1       | 2       | 3       | 4    |
|-------------------------|---------|---------|---------|------|
| 1. Anxiety              | 1.00    |         |         |      |
| 2. Career Maturity      | -0.29** | 1.00    |         |      |
| 3. Insecurity           | 0.55**  | -0.34** | 1.00    |      |
| 4. Academic Achievement | -0.42** | 0.51**  | -0.37** | 1.00 |

Note. \*\*  $p < 0.01$

Figure 2. Intercorrelation Matrix of the Study Variables



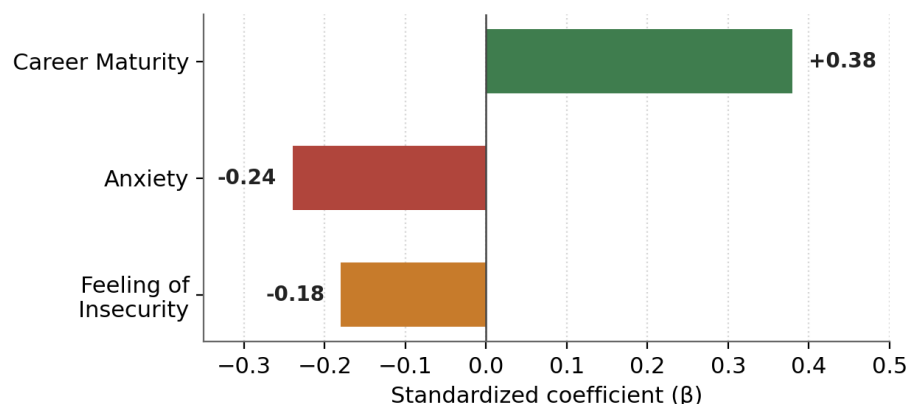
**6.3 Regression Analysis.** Academic achievement was regressed on the three predictors. The multiple correlation was  $R = 0.62$ , and together the variables accounted for about 38 per cent of the variance ( $R^2 = 0.38$ ,  $p < 0.01$ ), rejecting  $H_0$ s. Standardized

coefficients (Table 3) showed career maturity as the strongest predictor ( $\beta = 0.38$ ), followed by anxiety ( $\beta = -0.24$ ) and insecurity ( $\beta = -0.18$ ); all coefficients were statistically significant.

Table 3. Multiple Regression of Academic Achievement on the Predictor Variables

| Predictor             | $\beta$ | t     | p      |
|-----------------------|---------|-------|--------|
| Career Maturity       | 0.38    | 8.15  | < 0.01 |
| Anxiety               | -0.24   | -4.72 | < 0.01 |
| Feeling of Insecurity | -0.18   | -3.55 | < 0.01 |

Model:  $R = 0.62$ ,  $R^2 = 0.38$ ,  $F(3, 396) = 80.9$ ,  $p < 0.01$

Figure 3. Relative Contribution of Predictors to Academic Achievement (Multiple Regression,  $R^2 = 0.38$ )

**6.4 Gender Differences.** Independent-samples t-tests (Table 4) showed girls scoring significantly higher than boys on anxiety ( $t = 3.41$ ,  $p < 0.01$ ) and insecurity ( $t = 2.28$ ,  $p < 0.05$ ), while boys scored marginally higher on career maturity ( $t = 2.05$ ,  $p <$

0.05). The gender difference in academic achievement was not significant ( $t = 1.36$ ,  $p > 0.05$ ). Thus,  $H_0$  was rejected for the three affective/vocational variables but retained for achievement.

Table 4. Gender Differences on the Study Variables

| Variable             | Boys (M) | Girls (M) | t    | p      |
|----------------------|----------|-----------|------|--------|
| Anxiety              | 40.7     | 44.5      | 3.41 | < 0.01 |
| Career Maturity      | 56.6     | 54.0      | 2.05 | < 0.05 |
| Insecurity           | 37.5     | 39.3      | 2.28 | < 0.05 |
| Academic Achievement | 62.4     | 64.0      | 1.36 | > 0.05 |

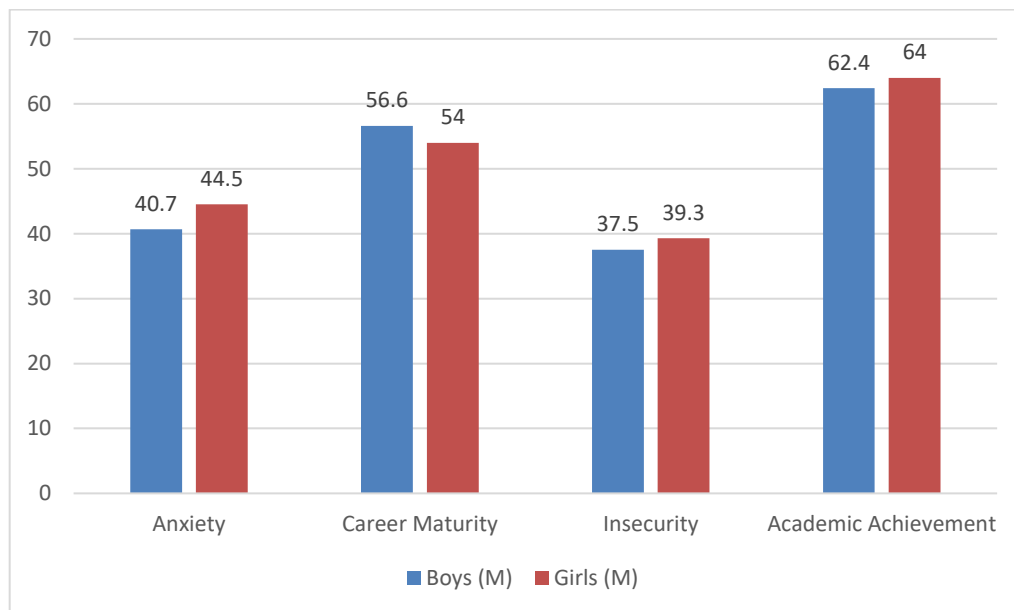


Fig 2: Gender differences on the study variables

Note. \*\*  $p < 0.01$ , \*  $p < 0.05$ , ns = not significant

## 7. DISCUSSION

The findings offer a coherent and theoretically consistent picture of the affective and dispositional correlates of academic achievement among senior secondary students.

The significant negative relationship between anxiety and achievement corroborates a long tradition of research demonstrating that high anxiety, especially in evaluative contexts, impairs performance.<sup>13</sup> The likely explanation lies in the cognitive-interference and processing-efficiency models: anxious students allocate a portion of their limited working-memory capacity to task-irrelevant worry, self-doubt, and physiological monitoring, leaving fewer resources for the actual demands of learning and examination.<sup>516</sup> For senior secondary students facing high-stakes board examinations, the evaluative pressure is intense, and those who experience it as threatening rather than challenging are placed at a distinct disadvantage.

The positive relationship between career maturity and achievement, and the finding that career maturity was the strongest single predictor, is particularly noteworthy and consistent with longitudinal evidence of a reciprocal link between the two.<sup>6</sup> It suggests that vocational readiness is not merely a distal outcome of schooling but an active motivational resource that energizes present academic effort.<sup>7</sup> A career-mature adolescent perceives a clear connection between current study and future occupational aspirations, and this perceived instrumentality sustains engagement, goal setting, and persistence. The practical implication is that career guidance,

far from being a peripheral service, may be a powerful lever for improving academic performance.

The negative relationship between feeling of insecurity and achievement extends the network of affective influences on learning.<sup>12</sup> Insecure students, preoccupied with perceived threats to their safety, worth, and belonging, tend to approach academic tasks defensively, avoid risk, and interpret setbacks as confirmation of inadequacy. The moderate strength of this relationship, somewhat weaker than that of anxiety and career maturity, is consistent with the view that insecurity operates partly through, and overlaps with, anxiety,<sup>11</sup> as reflected in the strong positive correlation between the two.

The significant interrelationships among the predictors deserve emphasis. The strong positive correlation between anxiety and insecurity indicates that these threat-based states tend to co-occur and may reinforce one another, while the negative correlations of both with career maturity suggest that a well-developed sense of vocational direction may buffer students against affective distress. This buffering interpretation, while suggestive, would benefit from confirmation through longitudinal and mediational research.

The gender differences observed are broadly consistent with the wider literature. The higher anxiety and insecurity reported by girls may reflect a combination of greater willingness to disclose emotional states, socialization patterns that heighten evaluation concern, and specific socio-cultural pressures. The marginally higher career maturity of boys may similarly reflect differential socialization toward occupational planning, though

its small magnitude cautions against over-interpretation. Importantly, these affective differences did not translate into a significant achievement gap, implying that girls achieved at levels comparable to boys despite carrying a heavier affective burden—an observation that speaks to their resilience and effort.

Taken together, the results portray academic achievement as the product of a dynamic interplay between debilitating affective states and facilitative motivational resources. The debilitating pulls of anxiety and insecurity is counterbalanced by the facilitative push of career maturity, and the overall academic outcome reflects the net balance of these forces.

## 8. CONCLUSION

The study set out to examine the relationship between anxiety, career maturity, and feeling of insecurity on the one hand and academic achievement on the other. The evidence permits the following conclusions. Anxiety and feeling of insecurity are significantly and negatively related to academic achievement, whereas career maturity is significantly and positively related to it. The three variables are meaningfully interrelated, with anxiety and insecurity clustering together and both standing in opposition to career maturity. Together the three predictors account for a substantial share of the variance in achievement, and career maturity emerges as the most powerful single predictor. Gender differences are evident in the affective and vocational variables—girls being more anxious and insecure, boys marginally more career-mature—though not in achievement itself. In sum, the psychological climate within the learner exerts a strong and educationally significant influence on scholastic performance at the senior secondary stage.

## 9. Educational Implications

**For teachers,** the results underscore the importance of creating supportive, non-threatening classroom environments that minimize unnecessary evaluative pressure and normalize mistakes. Formative assessment, constructive feedback, and a growth-oriented mindset can help convert debilitating anxiety into facilitative motivation.

**For school counsellors,** the study highlights the dual value of interventions that reduce anxiety and insecurity while strengthening career maturity. Relaxation training, cognitive restructuring, and test-taking skills can address affective deficits, while structured career education, occupational information services, and decision-making workshops can build vocational readiness. Given that career maturity was the strongest predictor, systematic career guidance deserves a central place in the curriculum.

**For parents,** the findings suggest the importance of providing emotional security, realistic expectations, and encouragement of the child's autonomous exploration of career options, rather than imposing rigid aspirations that heighten anxiety and insecurity.

**For administrators and policy planners,** the study argues for institutionalizing counselling and career-guidance cells, training teachers in the psychological dimensions of learning, and integrating socio-emotional and career-development objectives into secondary education.

## 10. Limitations and Suggestions for Further Research

Several limitations qualify these findings. The correlational design does not warrant causal conclusions; the direction of influence can only be inferred. Reliance on self-report inventories introduces possible social-desirability and response-set biases. Operationalizing achievement through a single examination score, while objective, captures only one facet of scholastic success. Finally, the sample, though reasonably sized and stratified, was drawn from a limited geographical area, restricting generalizability.

Future research could employ longitudinal and experimental designs to clarify causal pathways, include additional moderating and mediating variables such as self-efficacy, socio-economic status, and study habits, use multiple achievement indicators, and replicate across diverse cultural settings. Intervention studies evaluating combined anxiety-reduction and career-development programmes on subsequent achievement would be especially valuable.

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